

REMARKS

This Amendment is filed in response to the Office Action mailed October 28, 2009. Claims 1 – 39 are pending.

The Office Action indicated inter alia that Applicants' argument with respect to the dodecahydrate form of sodium phosphate has been found convincing; and that claims 8 and 26 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Therefore, new claim 38 has been added. This new claim recites that the base component (iii) comprises a hydrated form of sodium phosphate. In addition, new claim 39 has been added. This claim depends from claim 38 and recites that the hydrated form of sodium phosphate is the dodecahydrate. Applicants note page 7, lines 24-34 in connection with these amendments.

Applicants note that sodium phosphate (including hydrated forms thereof) is considered a "most preferred" inorganic base (see page 7, lines 24-25); that if the temperature increase caused by anhydrous bases would be excessive, hydrated instead of anhydrous forms of bases are preferred for preparing the mixture for extrusion (see page 7, lines 31-32); and that the heat of hydration of anhydrous sodium phosphate is particularly large (see page 7, line 33). Applicants submit that while the dodecahydrate is a preferred form of sodium phosphate for the process of this invention (see page 7, lines 33-34), other hydrates of sodium phosphate will also clearly provide advantage in moderating the heat of hydration associated with adding water to anhydrous sodium phosphate. Accordingly, new claim 38 recites: "the base component (iii) comprising a hydrated form of sodium phosphate". Applicants submit that the presence of a hydrated form of sodium phosphate as provided in new claim 38 as amended herein represents a feature for the preparation of a paste-extruded sulfonamide herbicide composition that is neither disclosed or fairly suggested by U.S. Patent No. 5,474,971 (hereinafter referred to as Sandell '971, or '971 when quoting the Examiner) and/or U.S. Patent No. 5,174,157 (hereinafter referred to as Sandell '157, or Sandell et al. when quoting the Examiner). Allowance of new claims 38 and 39 is respectfully requested.

Turning now to the rejections in the outstanding Office Action of October 28, 2009, Claims 1 – 7, 9 – 12, 15 – 25, 27 – 33, 36 and 37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sandell '971 in view of Riebel et al. (U.S. Patent No. 5,270,288). The Examiner states on page 3 of the Office Action that '971 teaches a process for preparing a rapidly disintegrating water-dispersible granular composition, comprising extruding a premix through a die or screen at elevated temperature without using any water, citing column

1, lines 37 – 38 and 56 – 59. Applicants agree with this characterization; this is the invention of Sandell ‘971. The Examiner also states on page 3 of the Office Action that *granules are also taught as being made by adding water to form an extrudable wet mix, breaking the product into granules and then optionally drying*, (emphasis added herein) citing column 1, lines 24 – 27 . Applicants respectfully submit that while Sandell ‘971 discloses the italicized passage, this disclosure does not apply to the teachings of the invention of Sandell ‘971. Rather, this disclosure is from WO 89/00079, which is prior art with respect to Sandell ‘971. And indeed this reference teaches away from Sandell ‘971, as the whole purpose of Sandell ‘971 is to avoid adding water in the process of extruding a premix, thereby eliminating the need for drying.

In addition, at the bottom of page 3 of the Office Action, the Examiner states that ‘971 further teaches conventional methods for preparing water-dispersible granule compositions which include **the extrusion of a water-wet paste**, citing column 3, lines 59 – 62. (emphasis added in the Office Action). While the cited passage does disclose the preparation of granule compositions, the identity of these compositions is not specified in this passage. Nor is the identity of such compositions disclosed in the rest of Sandell ‘971, as the cited passage relates to conventional methods with respect to the invention of Sandell ‘971. Therefore, this passage cannot be relied on to teach preparation of granule compositions sulfonamide herbicide free acids by the extrusion of a water-wet paste, as specifically claimed in Applicants’ claim 1.

Along the same line of reasoning, on the bottom of page 4 through the top of page 5, the Examiner, referencing KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007), suggests that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of ‘971 to include preparing a composition as a water wet extrudable paste, since ‘971 teaches a process for preparing extrudable water wet pastes and drying the granules. The Examiner states that one would have been motivated in view of KSR to use the same components (presumably those disclosed in Sandell ‘971) in a method comprising the step of forming a water wet paste. Applicants submit this bare assertion clearly does not fairly analyze the motivations with regard to Applicants’ invention, namely, preparing paste-extruded granular sulfonamide herbicide formulations that not only have satisfactory water dispersibility but also improved spray equipment clean-out properties. It is impermissible within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. See In re Wesslau, 147 USPQ 391, 393, 353 F2d 238 (CCPA 1965) and

Bausch & Lomb v. Barnes-Hind/Hydrocurve, Inc., 230 USPQ 416, 796 F2d 443 (Fed. Cir. 1986).

In addition, the Examiner states on the top of page 6 of the Office Action that Sandell (presumably '971) teaches that it is known to utilize water to make an extrudable wet mix. However, the Examiner does not point to which disclosure in Sandell '971 she is relying on to make this assertion. The Examiner then concludes on the top of page 6 of the Office Action that it would have been obvious to prepare a formulation comprising the composition of claim 1 formulated into a water wet paste since the problem to be solved is the same, namely, the preparation of a water dispersible particle. Applicants note that there are two passages in Sandell '971 which disclose the use of water to make an extrudable wet mix 1) the description of WO 89/00079 on column 1, lines 23 – 27 and column 3, line 59 through column 4, line 2. Neither of these passages discloses a composition as claim 1 specifically claims.

Applicants' invention, as set forth in claim 1, is directed to a process which involves, in part, preparing a mixture which comprises amongst its claimed components a sulfonamide herbicide free acid component and an advantageous amount (at least about 50 equivalent % in Claim 1) of base selected from inorganic base equivalents having conjugate acid pK_a s at least 2.1 units greater than the highest pK_a of the sulfonamide herbicide free acid component. Applicants respectfully submit that Sandell '971 does not disclose or suggest this advantageous combination. Although there are sulfonylurea herbicides listed among the active ingredients in Table 1 of Sandell '971, Applicant submits that Sandell '971 does not fairly suggest adding an advantageous amount of base selected from inorganic base equivalents having conjugate acid pK_a s at least 2.1 units greater than the highest pK_a of any sulfonamide herbicide free acid component which might be used in the Sandell '971 invention. Indeed, Applicants note a complete reading of the entire paragraph of column 14, lines 37–41 teaches the optional use of gas producing disintegrants for faster breakup of the granule in water, and combinations of sodium and potassium bicarbonates and carbonates with acids such as citric and fumaric acid as examples of suitable gas generating additives. Applicants submit that there is no suggestion of adding a suitable base in an advantageous amount relative to a sulfonamide herbicide free acid component. In addition, Applicants submit that one of ordinary skill would clearly not conclude from Sandell '971 that these gas generating additives should be used in a water-wet paste prior to extrusion.

In attempting to address this feature of the present invention, the Examiner states on page 5 of the Office Action that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Sandell '971 to include equivalent

50% of base in the composition. The Examiner concludes that one would have been motivated to manipulate ranges during routine experimentation to discover the optimum or workable range since Sandell '971 provides the general range, and that one would have been motivated to use the appropriate amount of base relative to the amount of other ingredients used in the process. Applicants submit that it is clearly not evident how one of ordinary skill would see the benefit of picking a sulfonamide herbicide from the list of actives in Sandell '971 and an inorganic base having a suitable pKa from the list of optional additives in Sandell '971 and combine them using an advantageous equivalent % relationship along with sufficient water to make a suitable paste for paste extrusion. Furthermore, both the suggestion that Applicant's methods should be carried out and an expectation of success must be found in the prior art, not Applicant's disclosure. See In re Dow Chemical, 5 USPQ 2d. 1529, 1531, 837 F2d. 1064 (Fed. Cir. 1988). Applicants submit that Sandell '971 clearly does not suggest that paste-extruded sulfonamide herbicide compositions having both excellent water dispersibility and significantly improved spray equipment clean-out properties can be obtained by the method of Claim 1.

The Examiner noted in the Office Action of October 28, 2009 on page 10 that in the Amendment filed on July 14, 2009, Applicants argued that one skilled in the art would recognize that the premix characteristics presented in Sandell (presumably '971) relate to premix specifically designed for a heat extrusion process described therein, and that one of ordinary skill in the art would not have chosen certain features for the heat extrusion technology and selectively transfer those features to a very different past extrusion technology. The Examiner disagreed with this conclusion, stating that known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art. Applicants respectfully submit that the variation that the Examiner is proposing, to include the extrusion of a water-wet paste in Sandell (presumably '971), would not have been obvious to one skilled in the art, since the Sandell '971 reference specifically teaches away from the use of water.

Moreover, the Examiner also noted on the bottom of page 10 of the Office Action that Applicants argue that Sandell et al. (presumably Sandell '157) teach a product based on heat extrusion and that Sandell (presumably Sandell '971) does not teach the premix is suitable for other processes, such as those which include the extrusion of a water-wet paste. The Examiner states that she is not persuaded by this argument, since Sandell et al. (presumably Sandell '157) teach conventional methods of preparing granules were known via the steps of a) water spraying the equipment, b) spray-drying, c) extrusion of a water wet paste and d) dry

compaction (column 2, lines 55 – 65). Applicants note that this is the same disclosure cited by the Examiner in Sandell '971 on column 3, line 58 through column 4, line 2. The Examiner concludes that simple substitution of the composition disclosed in Sandell (presumably Sandell '971) in the process of Sandell et al (presumably Sandell '157) render the claims prima facie obvious. (Applicants note that this is a modification of the secondary reference (Sandell '157) with teachings of the primary reference (Sandell '971), instead of the way the references are applied in the rejection above) The Examiner also states that applying a known technique to a known product ready for improvement to yield predictable results is prima facie obvious. Applicants respectfully submit that the substitution of the composition disclosed in the invention of Sandell '971 in the process of Sandell '157 is impermissible for the same reasons discussed above with respect to the modification of Sandell '971 with the teachings of conventional methods as disclosed in Sandell '971 at column 3, line 58 through column 4, line 2.

Applicants respectfully submit that there is absolutely no teaching in Sandell '971, Sandell '157 or any of the prior art cited therein, of utilizing water to make an extrudable wet mix with a mixture comprising a sulfonamide herbicide free acid, an additive and a base as recited in Applicant's claim 1. Therefore, withdrawal of the rejection of claims 1 – 7, 9 – 12, 15 – 25, 27 – 33 , 36 and 37 is therefore respectfully requested.

Claims 13, 14, 34 and 35 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sandell '971 in view of Riebel et al. (U.S. Patent No. 5,270,288). Riebel is combined with Sandell '971 to teach the recitation of sulfonamides thifensulfuron-methyl and tribenuron-methyl. However, Applicants respectfully submit that Riebel fails to cure the deficiencies of Sandell '971 as discussed above.

In addition, Claims 13, 14, 34 and 34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sandell '971 in view of Sandell '157. The Examiner cites Sandell '157 as teaching sulfonylurea compositions including sulfometuron methyl, thifensulfuron-methyl and tribenuron-methyl. However, Applicants respectfully submit that Sandel '157 fails to cure the deficiencies of Sandell '971 as discussed above.

For these reasons, withdrawal of the rejections of claims 13, 14, 34 and 35 is also requested.

In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Applicants hereby request an interview with the Examiner and her Supervisory Patent Examiner to discuss the above.

Applicants are submitting herewith a Supplemental Information Disclosure Statement which includes WO 89/00079, as well as U.S. Patent No. 4,065,289, also discussed in Sandell '971 on column 1, lines 28 – 32. In addition, cited on this Supplemental Information Disclosure Statement is a paper titled "Cleaning Field Sprayers to Avoid Crop Injury" from the University of Missouri and a paper titled "Cleaning Field Sprayers" from Kansas State University. The Examiner's consideration of these references is requested.

Please charge any fees due and not accounted for in connection with the filing of this Amendment to Deposit Account No. 04-1928. Should any other fee be due, please charge such fee to Deposit Account No. 04-1928.

Respectfully submitted,

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